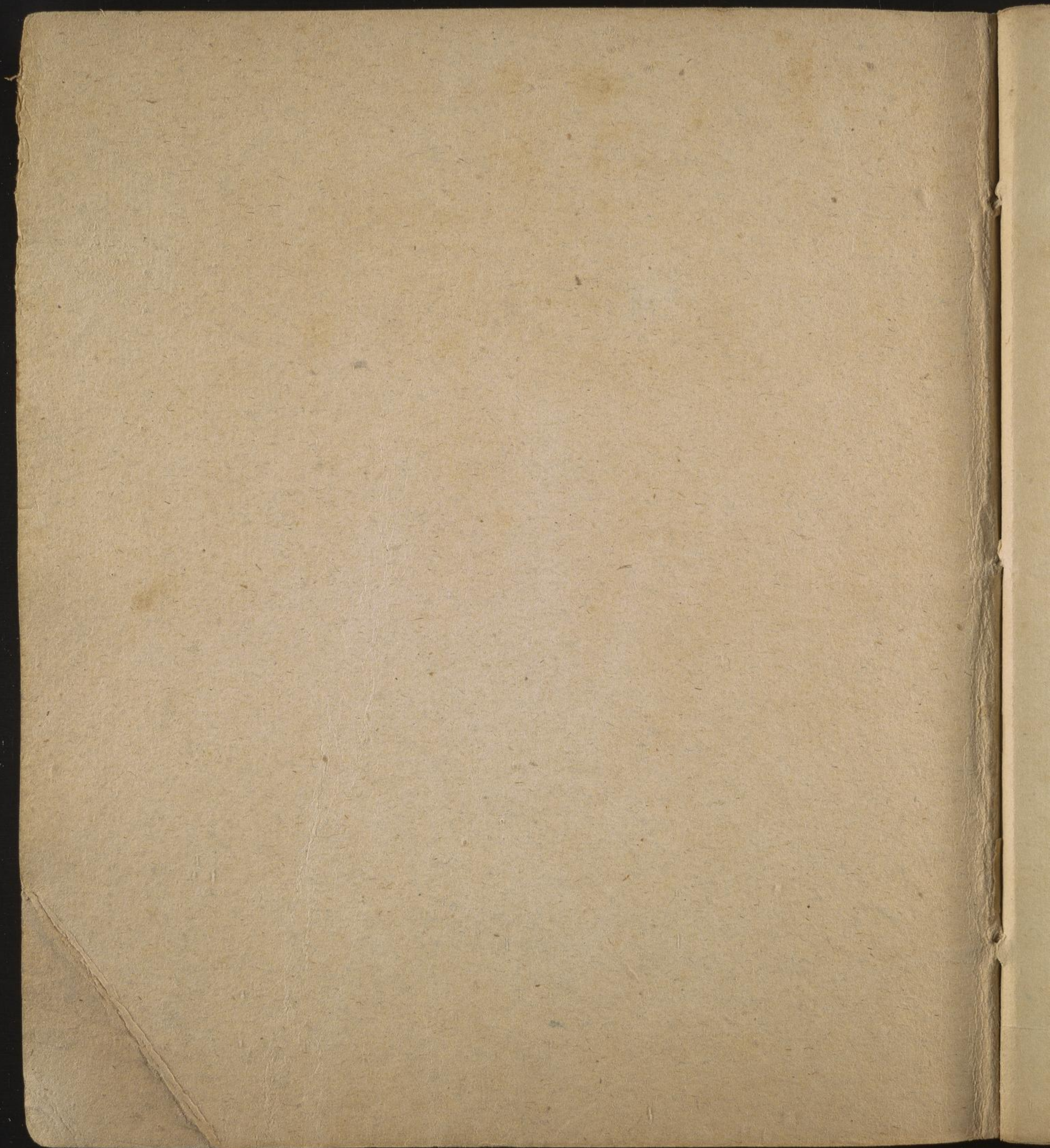


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12



of Local Diseases
of the black color of the
Africans. — 505

of the proximate cause
of Death 525

✓ But again - The diseases of the same Systems differ materially in their degrees.

E.g.: There is a febris & febricula - there is
Rheumatismus & Rheumaticula
Pneumonia & Pneumonicula - in the Arter.
Phrenitis & Phrenicula - or acute & chronic Delirium.
System - There is involuntary motion, and
motion ^{in its duration} ~~is~~ contrary only to the will - There
is Dysentery & Dysentericula in the Alimen-
-tary canal - There is Hepatitis acute and
chronica - There is leuc & gonorrhoea in the
lymphatic system & There are the ^{external} ~~inter~~ &
internal measles - & so on in all the other
Systems. In each of these, the disease is limited
so closely to the system affected, & acts on it
^{not to confine}
so feebly, as to ~~allow~~ the patient to his bed.

Lastly - Diseases exist in one part of the
same System, and produce their symptoms
I have seen Abscess in lungs ^{& Rheumatism} only in much ^{acute} ~~acute~~ ^{stomach} ~~stomach~~
only in Another. The debility ^{of} ~~of~~ ^{is} ~~is~~ ^{is}
seated in the foot, & yet it appears ^{first} in the

Yet keep within the limits of the
 dominion formerly assigned to them.

3 The Diseases of the Stomach & Bowels
 often exchange situations.

4 The affections of the skin particularly
Sores - and tetters of all kind ~~are~~ ^{frequently}
 appear in different seasons in diff:
 parts of the body. —

5 ~~the~~ most of the diseases of the glands
 are disposed frequently to change their
 places, more especially Dropsies.

The diseases of the two last systems
 which I have described, ~~have~~ afford
 no instances of metastasis such as have
 been mentioned. ✓

With this we finish the general

neck. Breach lungs excite a ^{vomiting} ~~cough~~ ^a ~~series~~
 a weak stomach a cough —
~~series~~ — and a stone in one kidney has in
 one instance produced pain only in the
 other.

diseases. I have done little more than
 named them. But I have ^{said} ~~delivered~~ ^{into}
 to open a new field of observation to
 your attention. The more you view
^{General} diseases thro' the medium of the systems
 which I have enumerated, the more
 definite & precise will ^{be} your ideas of
 them. Endeavour to find out new
 relationships between them ~~with these~~
~~between different systems, or remote~~
~~foreign~~ parts of the same system. One great
 advantage will arise from increasing
 this species of knowledge - it will lead
 to the more certain & successful use
 of many Remedies - for they act as
 certainly on specific systems, as those
 systems act on each other. ~~The~~ From a

V 5 That the multiplication of Diseases w^{ch}
are the effects of one or at most, of two
original causes ^{resembles} polytheism in religion.
The physician who considers every different
affection of the different Systems, or ~~diffs~~ every
affection of different parts of the same System,
as a distinct disease, resembles the Indian, or
the new negro who considers water - Dew -
Ice - Snow - and frost as distinct species,
while the physician who considers disease
as ^{an excited} ~~a~~ ^{part of} state of the System only; and ^{as} derived from
only one cause, viz: Debility, resembles the
Philosopher who considers ~~fire~~ Dew - ^{water} ice - snow
& frost as different states of water, ^{only} and ^{as} all
derived from one cause, ^{viz:} the absence of Heat.

Having finished gen^l diseases, I should

System ^{is} 505
of the ~~force~~ affected - of the force, or degrees
~~excessive or deficient~~
of ~~vitality~~ ~~or morbid~~ action in it - and
the choice of the remedy suited to the system which
afterwards in ~~the~~ exact accommodation
is affixed to ~~the~~ force of that remedy, to
of ~~a remedy~~ the ~~remedy~~ the degree of morbid action.
~~that action~~

Lect: Feb: 28. 1793.

we come now to speak of the
~~general~~ causes of partial or local dis-

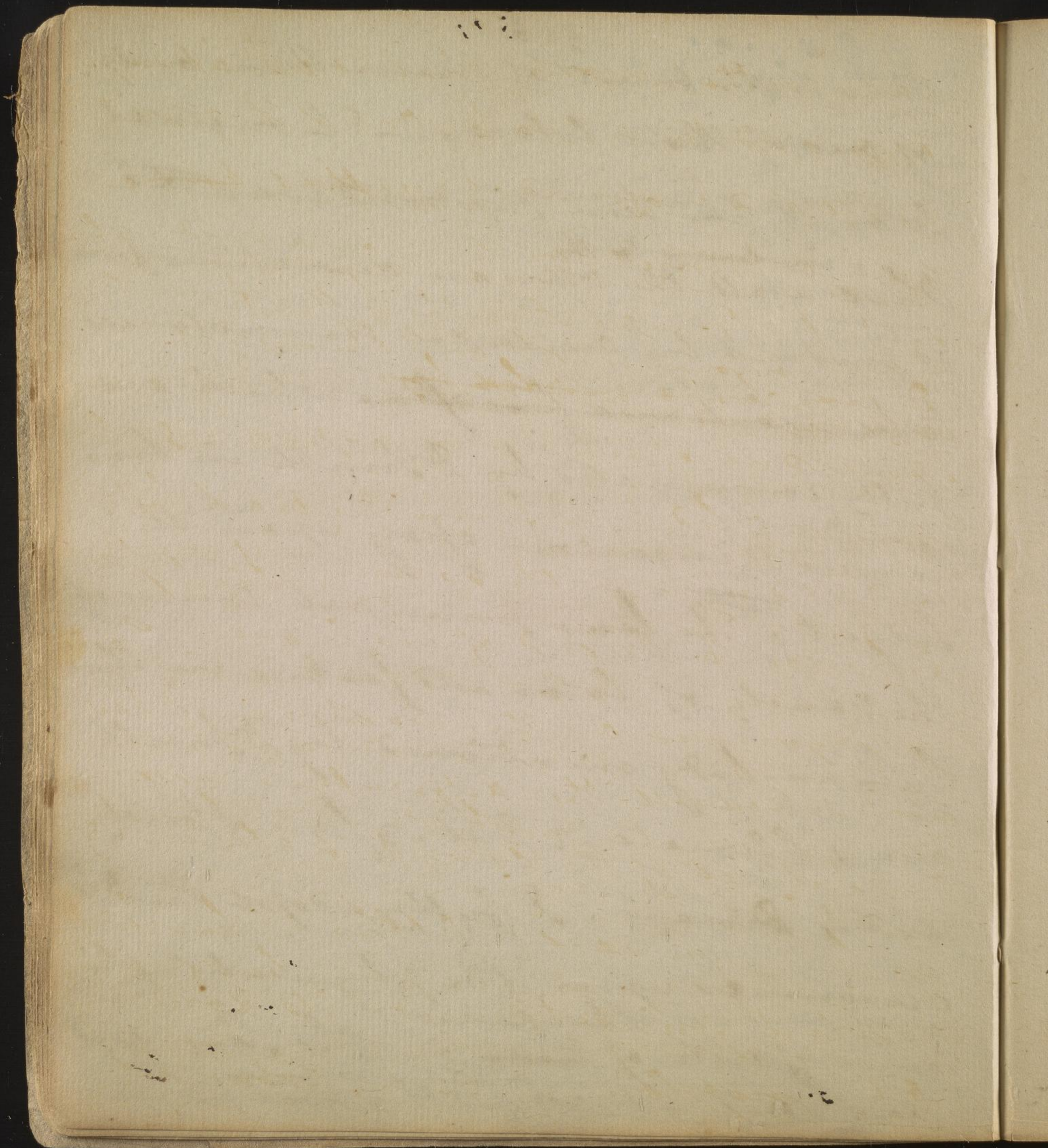
ease. - of a Physician
The first thing which strikes the eye
in contemplating the human ~~eye~~ body,
is the variety ^{in the} of color, ^{& features which are} observable among
the different nations ^{ch} which inhabit our
globe. This variety must be the effect
of disease, for there can be no doubt
but the whole human race must
have been derived from one pair, &

proceed to treat of their general consequences viz:
disorders. I say general consequences, for there
may be disorder in a part which has not
been preceded by Disease or morbid excitement.

There is likewise frequently a mixture of
disease & disorder in the same part as inflam.ⁿ
& Suppuration or phirrus in the liver ~~disorder~~
morbid excitement & inflam.ⁿ & hemorrhage.

The usual consequences of morbid excitement
or disease are 1. Inf.ⁿ or effusion of red globules
into serous vessels - 2. Hemorrhage ^{& circulation} ~~or effusion~~ - 3. Effusion
& stagnation of Serum - ~~or~~ Coagulable - and
red Blood - first ends in resolution 2 & 3^d in
Suppuration - all 3 in congestion like gangrene.
4. gangrene - or loss of power of emitting life
from great force of action in any part. These
are ^{the} acute effects of disease. Chronic effects are
tubercles - phirri - ^{& tumors of all kind - cancers} opifications & calvarious
matter - Dropsical swellings - ~~cancers~~ ^{or} many
of them are not preceded by morbid action.

This pair must of course been only
 of one of those colors. — The original
 color it has been supposed was the
^{inclining to the}
Olive — all the others are deviations from
 it produced by accidental circumstances
~~to be mentioned hereafter~~ which are
 fully enumerated by Dr Smith in his
 learned & ingenious essay upon this
 subject. ~~The~~ ^{four} principal causes of
 the variety of color and feature in the
 human body mentioned by Dr Smith
 are 1 Climate - 2 Diet - 3 state of society,
 and 4 Disease. I fully adopt the Dr's
 reasonings upon the physical influ-
 -ence of each of ^{these causes} ~~these~~ on the skin and
 face, and will add further ~~that~~ the in



favor of that work, that it has always
 appeared to me to be one of the most
 acute and profound essays that ~~has~~ I
 have ever met with upon a medical
 subject. Perhaps it is the better from the
~~ignorance of~~ ^{ignorance of} ~~any theories of~~ ^{any theories of} ~~medicine,~~ ^{medicine,}
 some one of which perhaps might
 have misled him from the track ^{ch} ~~in~~
 conducted him with so much success
 & honor to the end of his inquiries.

Ingenious as this work is - it has
 not solved all the difficulties upon
 the subject of the ^{variety of} color & features of
 the human race - Altho it has laid
 a solid foundation for its ^{being} done by
 others. ~~possible~~ — If the ^{variety of} ~~color~~ ^{be}

[Faint, illegible handwriting in cursive script, likely a historical document or letter.]

color & features be produced by the ⁴ causes
 which have been mentioned, it has
 been asked why ^{they} do not ~~these~~ disappear
 as soon as the above causes have ceased
 to operate. This is so far from being
 the case, that a negro retains his color
 for ^a century after being rescued from
 the heat of the sun - from unwholesome
 diet ^{from} - ^{from the diseases} savage society and ~~biliousness~~
 which have been supposed to be most
 instrumental in producing his
~~dark~~ black color. - To this remark there
 is a small ^{exception, for} ~~objection~~ - a considerable
 shade of the black color always dis-
 appears ~~under the above change of~~

[Faint, illegible handwriting in cursive script, likely a historical document or letter.]

~~Circumstances~~ in two or three generations,
and the features seldom fail of becoming
regular in the 3rd generation under the
above change of circumstances.

To account then for the duration of
a preternatural color in the skin after
the causes which induced it cease to op-
erate, I need only remind you of a
fact mentioned formerly, & that is
that ^{the qualities of} ~~is a change in the color of the~~
skin are the most transmissible to
posterity of any peculiarity of the
body, and the least liable to be
affected by time or external cir-
cumstances. —

✓ as well as in the state of horticulture
- agriculture - building, & cloathing, by
which ~~was~~ the great sources of marsh
& human miasmata were dried up.

But the deep black color ~~and~~ the big
lips ~~and~~ the flat nose - and the wooly
head of the negro, require a specific
 theory to explain them. I shall offer
 one which I hope will be satisfactory.

I formerly took notice of the influence
 of diet, ~~and~~ manners & the state of society
 in producing diseases of the skin, and
 ascribed the decay of Elephantiasis -
 & Leprosy to the change in the diet, and
 employment of mankind by the
 revival of letters & the change in the
 political state of ^{Europe} ~~the world~~ in the
 14 & 15th centuries. During the prevalence
 of the prevalence of
 of unwholesome diet - & savage manners,

of morbid
V probably by a translation of and
action, & an effusion of morbid humors in the skin
disposition of black bile to the rete
mucosum, for the bile if it is well
known sometimes imparts a black color
to the blood, ^{in bilious fevers,} and also to the whole skin
in that a disease which is known by
the name of the black jaundice. now this

& bilious diseases among a people
 who inhabit a hot country, it is
 easy to conceive that a disease may
 have been induced ~~upon the skin~~ which
 we call the Leprosy, ^{by means of a meta-}
~~stasis formerly hinted at,~~ and when once
 produced in a few families might
 have spread over a ^{considerable} part of the
 globe. — To this Leprosy — I ascribe
 the color of the negroes. my reasons

for this opinion are as follow.

The Leprosy is accompanied
 1 ~~It is the~~ ^{with} ~~the~~ ^a ~~in~~ ^{black} ~~in~~ ^{color} ~~in~~ ^{to} ~~some~~ ^{of} ~~vir-~~
 = staves, a black color to the skin. of

this I have lately met with a most
 satisfactory proof in Dr. Thier's
 account of the diseases of Astoria

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in Spain. I shall give you a translation of his own words upon this subject. "There are says he above 20 hospitals for Lepers in this province. - and I have observed six species of the disorder. The 2nd species is called the black Albasas of the Arabians. The skin becomes black - thick - & grainy. There are neither pustules - nor tubercles, nor scales nor any thing out of the way on the skin. The body is not in the least emaciated - The breathing is a little difficult, & the countenance has some fulness in it. They exhale perpetually a peculiar & disagreeable smell, which I can compare to nothing

✓ This small mentioned by Dr. Henry con-
with a small modification
in the native African to this
day.

Mr. Harkins takes notice of the
in his travels into the interior part of
Africa. They possess the features of the
negro. Mr. Harkins has ^{further} described them
in the following words. "Their hair &c
p. 116 - also 117-118. - This artful smeller
does not stop here - the idea of its being a
disease, and its specific nature did not
escape him - hence he adds - "This
whiteness does not ^{occur} in the skin is com-
mon in Java, Panama where it is perpetuated through many
generations. ^{a diversity} frequently occurs
changes equally great in the symptoms
of many other diseases. The same state of
malignant bilious fever is often marked
by ^{opposite colors in the} black and white stools - by opposite

but the smell of a mortified limb!

~~not the~~

2 This The Leprosy is described in the
^{by ancient writers} ^{universal}
 Old testament as imparting a preternatural
 whitening to the skin. This white-

ness is sometimes in spots, & again it
^{Persons}
 extends over the whole body. Those
 thus marked have ^{lastly} been called Albinos. &

~~the negroes in every part of the world~~
 It sometimes appears mixed with black
~~often exhibits these phenomena~~
 spots. A picture of a negro in Virginia mentions

~~Thurberworth in his Voyages~~
~~in whom this mixture of white & black~~
~~was observed~~ instances of them. Mr Peale has
 had taken place has been happily preserved by
 preserved in his museum. ~~the picture~~

~~of a negro with white spots on his~~

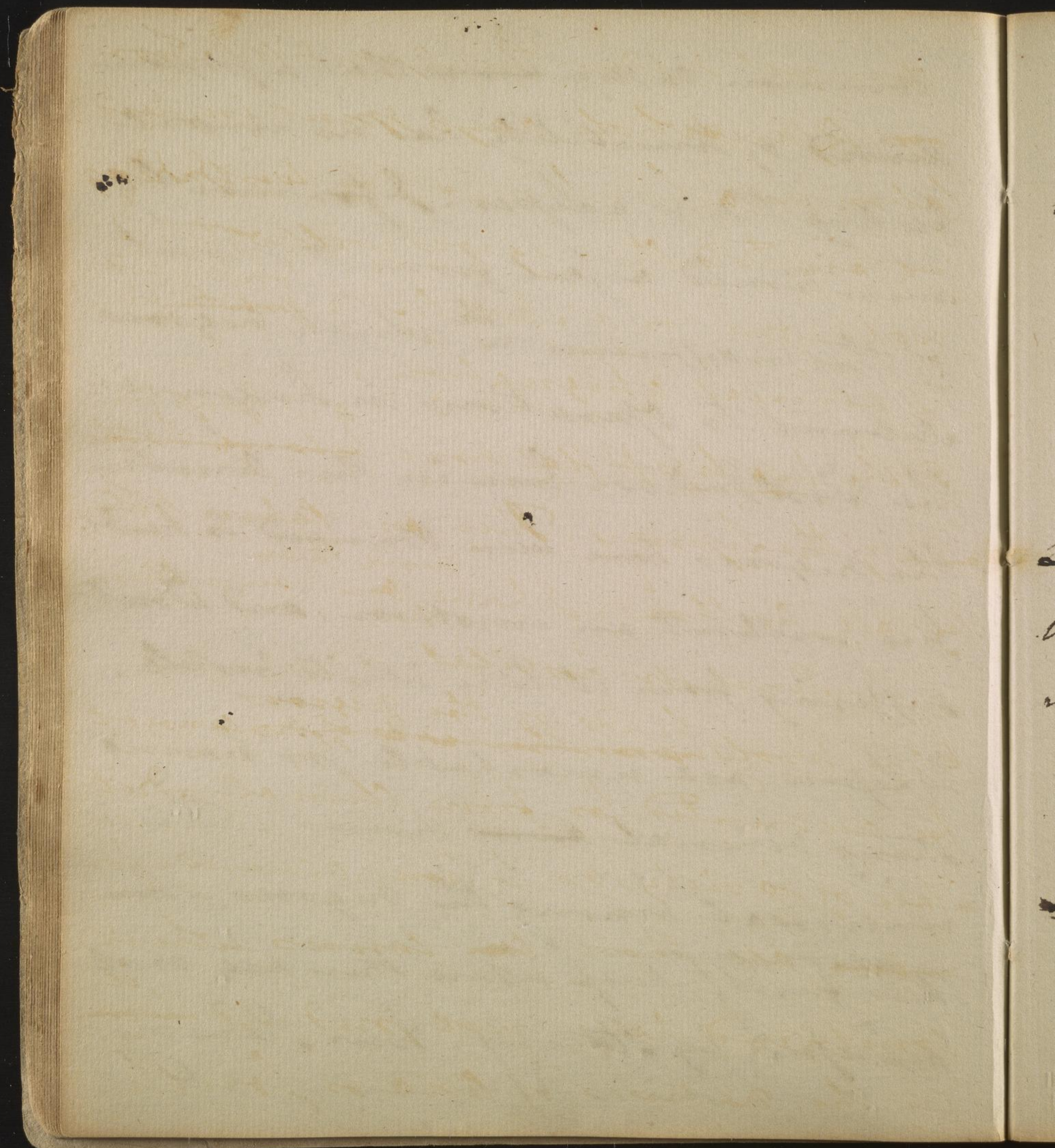
~~lips flat nose &c~~
 3 The Leprosy is attended with big

3 The Leprosy induces a morbid insensi-
 bility in the nerves. In countries where
 the disease is common, it is

temperature of the skin, & by opposite states
of the Alimentary Canal.

The original connection of ^{the} ~~this~~ ^{further}
black color of the negroes with Leprosy is suggested
by the following fact extracted from Mr
Bougainville's Voyage &c

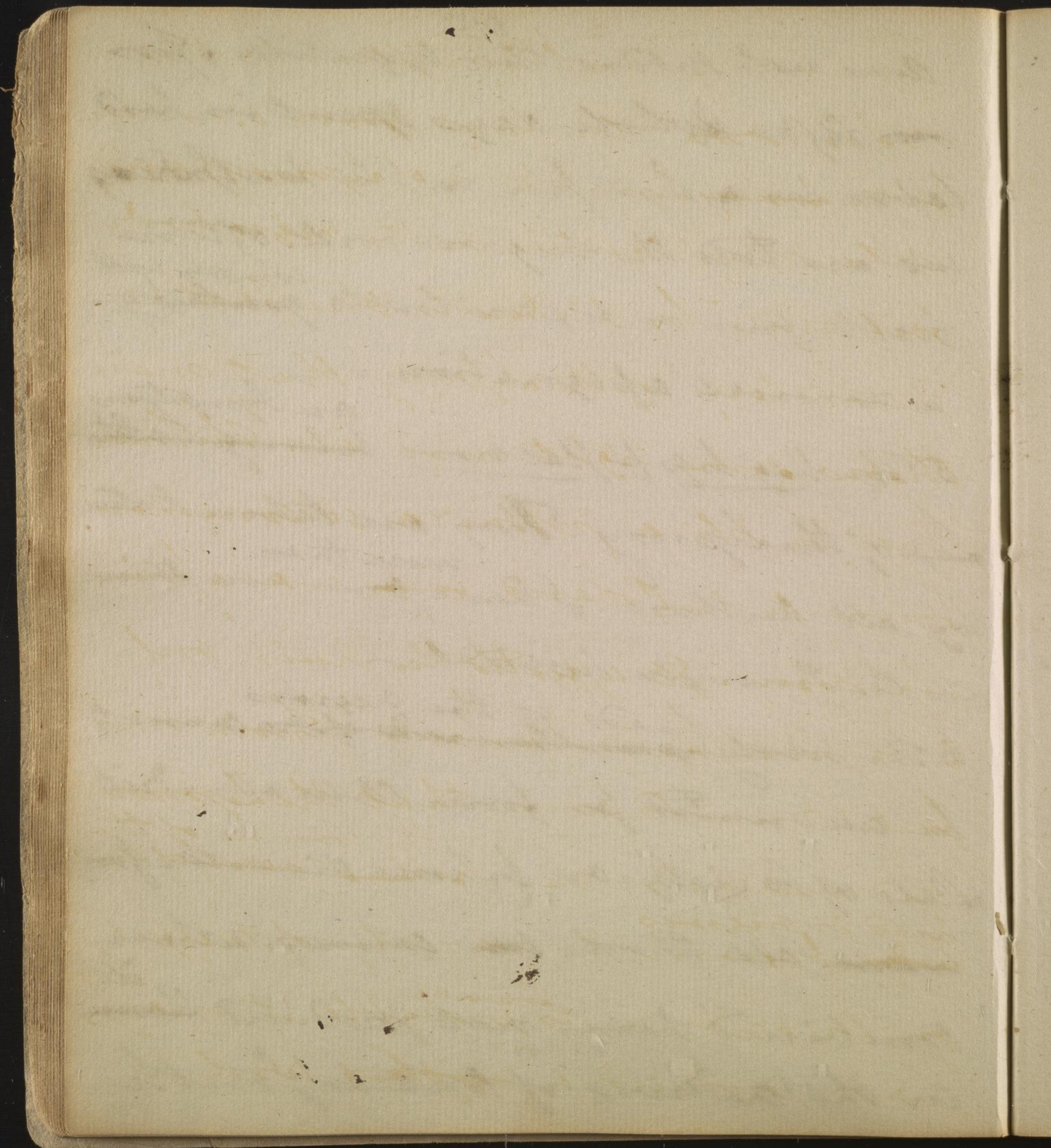
common to say ~~more~~ that a person
 devoid of sensibility has no more
 feeling than a dog. I formerly
 mentioned a fact from De Morely
 of the indifference ^{to} which negroes
 submit to operations in surgery in
 the West Indies. Even in this country
 the negroes have been observed to handle
 fire without an emotion, and ^{to} not
 suffering from it like white people.
 Lepers are remarkable for having
 strong venereal ~~diseases~~ diseases. This is
 universal among the negroes. - hence
^{uncommon} their fruitfulness where they are not
 depressed by slavery. Even slavery



does not subdue the appetite, For
~~we~~ After whole days spent in hard
labor in a hot sun in the West Indies,
we are told the negroes will often
walk five or six miles to ^{comply with} ~~gratify~~
a venereal apignation. —

5 The big lips & flat nose ^{are symptoms} ~~belonging to the~~
~~signs~~ of the Leprosy. They are taken notice
by all Authors. I have ^{more than} ~~once~~ seen them
in the Peninsular hospital. —

6 The woolly ^{heads of the negroes} ~~heads of the~~ cannot
be accounted for from climate - diet
state of society, or bilious diseases - for
~~none~~ all those ~~can~~ causes when
combined have not produced ^{it} ~~them~~
in the natives of Asia or forth



who inhabit similar latitudes.

American wool is peculiar to the
negro. ~~See~~ There are many proofs of similarity
of the ~~lesser~~ symptoms of leprosy, and
of the peculiarities in the negro body
to tell me - but there is one fact in
the history of the leprosy that may
throw some light upon it. The Tricho-
coma or plica polonica so common
formerly in Poland ~~is~~ was ^{symptom} ~~affairs~~
of leprosy. It affected the hair only,
in a peculiar manner. From this
fact it would seem that the leprosy
had found its way to ^{the covering of the} ~~that part of the~~
head in negroes
~~body~~, & from the variety of its effects
on the skin, it is ^{as} probable it may
have produced a ~~wool~~ wool in

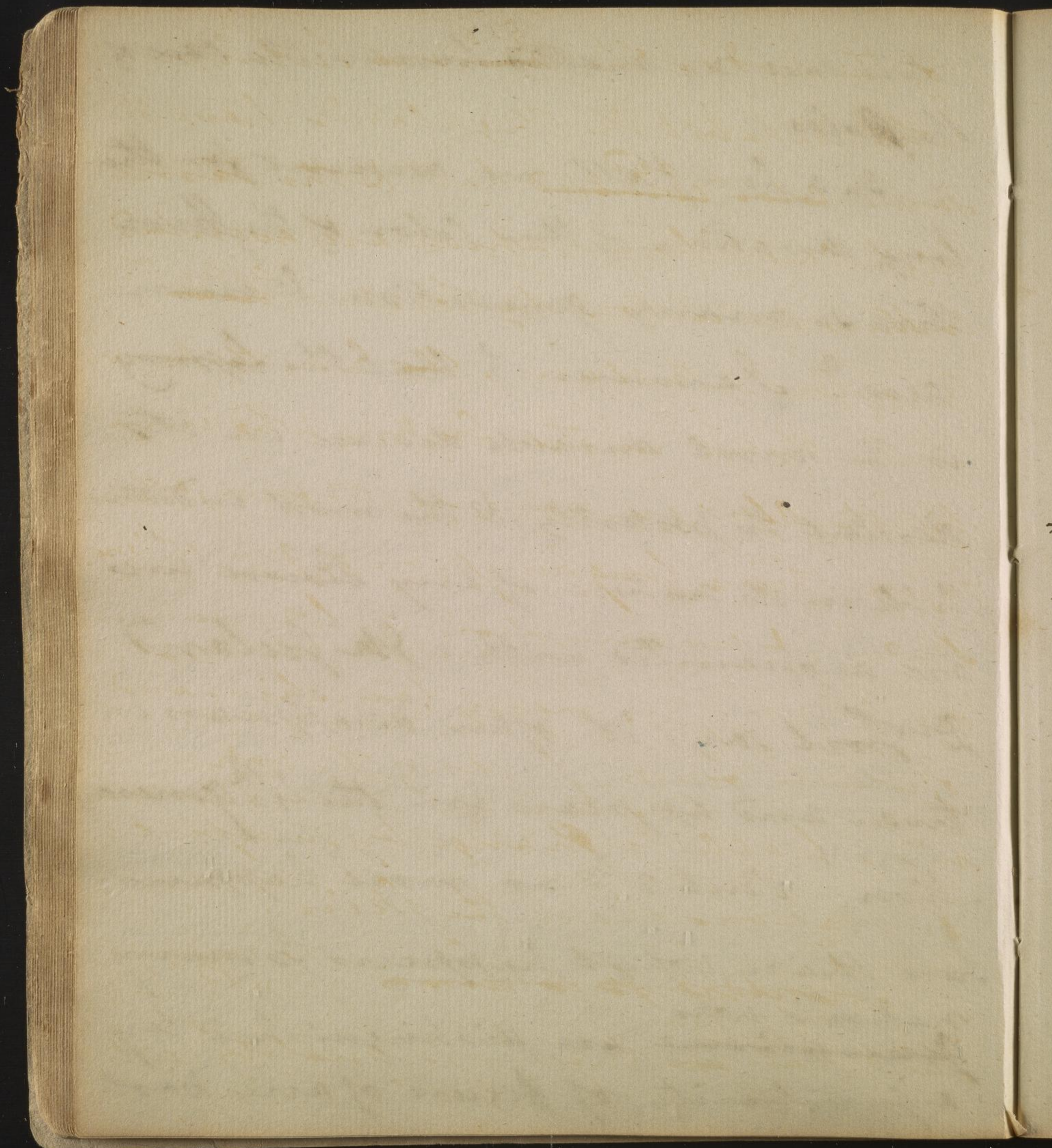
a note

✓ It affects before it appears
as in a family in madras.
A lady of a dysentery family married,
- all her children took the disease
at 16 & died. Her husband then
took it & died, & finally the disorder
appeared in herself - of which
she died.

517

this case as matted hair in the case of
the Poles.

But how shall we account for the
long duration of this color of the skin
thru so many generations & even
ages? I answer; that the Leprosy
is the most dreadful disease in its
descent to posterity, & the most indestruc-
tible in its nature of any disease we
are acquainted with. In Iceland
Dr Foil says it often disappears in
two - and appears in the 4th genera-
tion - But 2^{ly} no more happens
here than what happens to many
nations who
~~generations~~ are distinguished by
a peculiarity of figure of any part



518
of the body. The ~~ancient~~ ⁵¹⁸ Scotch people
who inhabit the Highlands, have the
same ~~color~~ ^{red} ~~coloured~~ hair & the same
high cheek bones which are ascribed
to their ancestors by Tacitus ~~after the~~
Invasion of Britain. The even the tumour
in the throat in the Celts who inha-
bit the Alps are transmitted from father
to son this a long succession of generations.
Scrophs & consumption in like manner
are hereditary in many families, ^{both} ~~and~~
of which every part of the body much
more liable to change by successive
generations than the skin.

~~Should it be~~ ^{no} Should it be
said that ~~the~~ infectious quality exists

V But it is infectious - white
women become dark col? after
sleeping long with black men, more
especially if they have children by
them. Of this I have heard of two
instances, the one in Penns^a. -
the other in Carolina.

in this color of the ⁵¹⁹ skin in negroes, I
answer that this is the case with the
Disease at present in many parts
of the world. ^{It has} ~~no~~ to ceased to be common
evincated by Contact. V

Should it be said that the negroes
are as healthy & long lived as others
people - I answer - that ~~are~~ no local
diseases of the skin affect ~~the~~ the general
health of the body, or the duration of
human life. Dr. Ferrius says that the
Itch was very common in Astoria,
speaks with surprise of the longevity ^{the}
of many people who were affected w:
it. In the negroes who are now
in this country, perhaps it w?

✓ The color in the negroes is seated
in the Rete mucosum. —

520

be proper rather ⁵²⁰ to consider the black
color as an effect of an evanescent
disorder. The existence of a solitary sym-
ptom of a Disease after the disease is
cured is no uncommon thing. ^{many} in the
A dark color often continues ~~and~~
days on the tongue after the cure of a
bilious fever, & ~~the~~ red marks often
appear on the skin many months
after the recovery from the small pox.

The theory I have endeavored to
establish leads to two very natural
reflexions. 1 That all the claims of
superiority of the Whites over the
blacks on acc² of their color are founded
in ignorance & inhumanity. If

✓ equality of mankind.

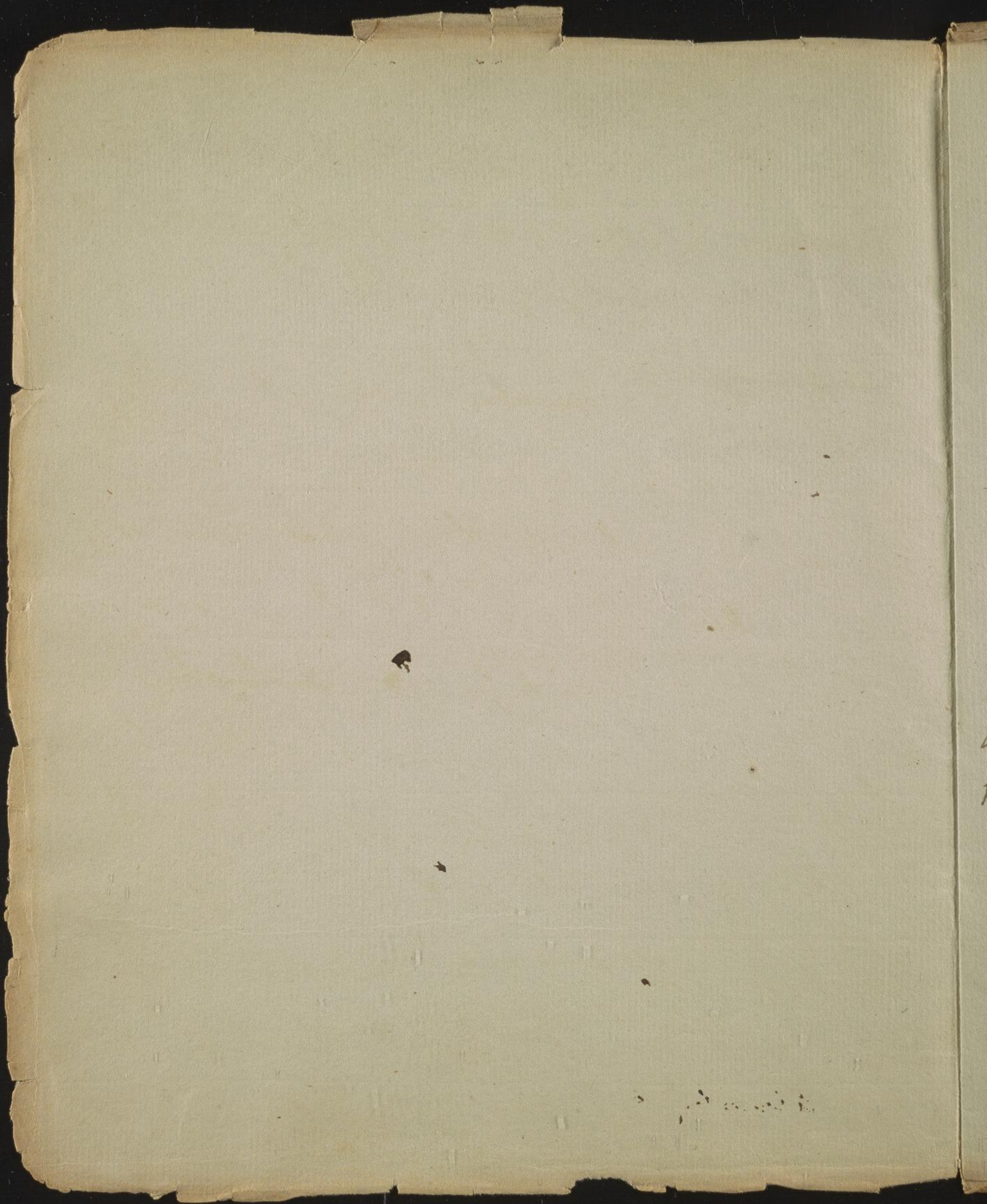
3^{ly} Is the black color of the negroes a disease,² ~~and are all diseases curable?~~

- then let humanity & science combine their strongest efforts, & endeavour to discover a remedy for it. Nature has lately unfolded a banner upon this subject. ~~It invited us to her~~ ^{begin} ~~Standard~~ She has ~~performed~~ ^{performed} several spontaneous cures of this disease of the skin in several black people in this Country. In a certain Henry Pook who lately travelled thro' this city, and was exhibited as a show for money, the cure was nearly complete. The change from black

the color of the negroes be the effect of a disease, instead of inviting us to tyrannize over them, it should entitle them to a double portion of our humanity, for disease all over the world has always been considered as the signal of compassion. —

2 If the theory I have delivered should teach us, ^{as persons of a different skin,} the necessity of keeping up that ~~prejudice~~ ^{prejudice} ~~segregation~~ ^{segregation} against a ~~sort of~~ ^{sort of} ~~such~~ ^{such} connections with them as would tend to infect posterity with any portion of their disorder. — This may be done upon the principle I have mentioned without offering any violence to humanity, or calling in question the original descent and natural

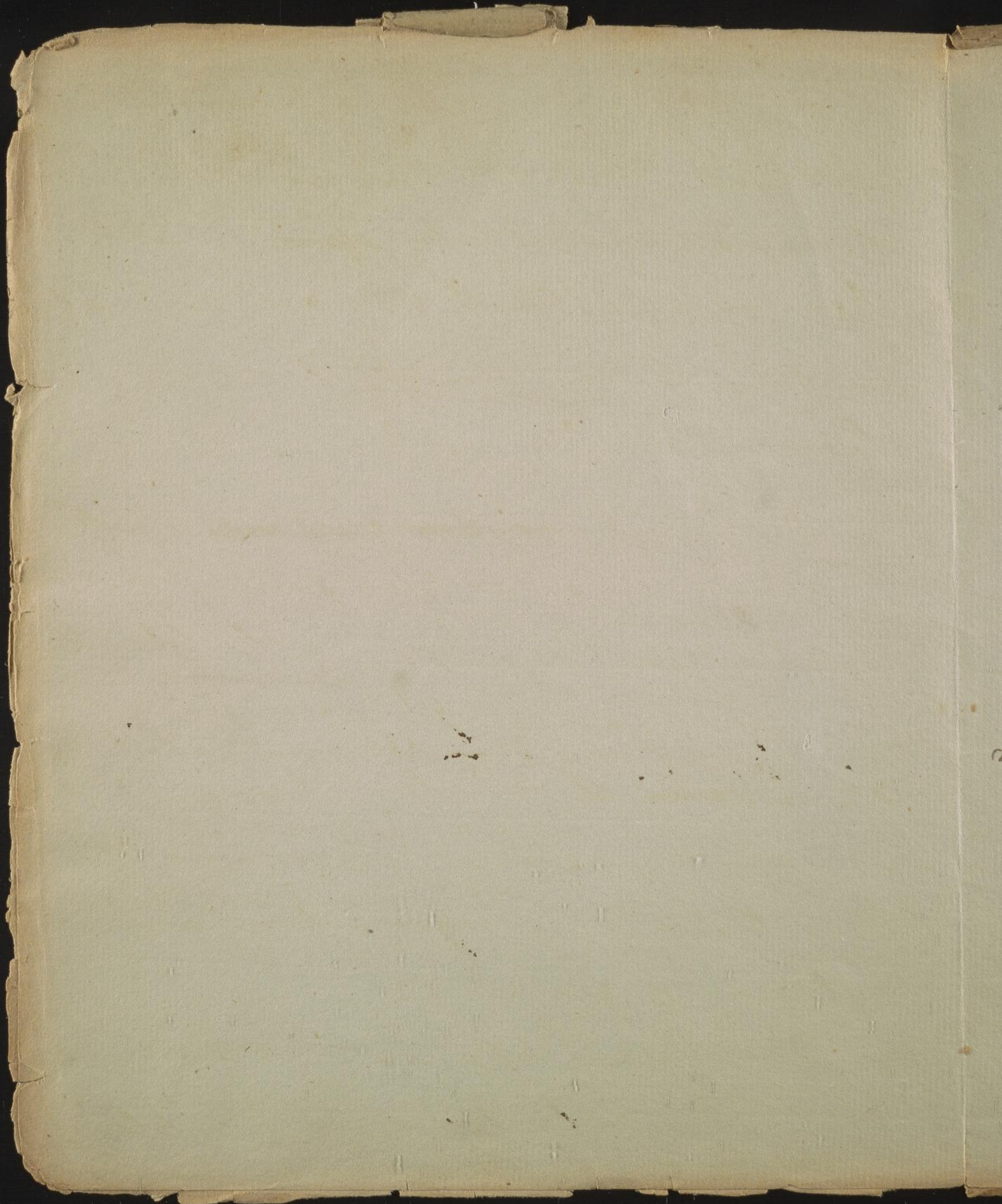
to a natural white flesh color began
 about $\frac{5}{4}$ years ago at the ends of his
 fingers, and has extended gradually
 over the greatest part of his body. The
~~proof~~ ^{proof} of the which formerly perforated
 the cuticle in this man has been
 changed into hair. — No change in the
 diet, drinks, dress, employments or
 situation of this man, had taken
 place previously to this change in
 his skin. — But this fact does not
 militate against ^{artificial} attempts to dislodge
 the color in negroes, any more than
 the spontaneous cases of many other
 diseases militate against the use



of medicine in the practice of Physic.

To direct ^{our} inquiries & experiments
upon this subject, I shall throw out
the following facts.

1 In Henry ~~exactly~~ ^{exactly} maps, the color was
first discharged from the skin in three places
first on which there was most pressure
from cloathing, or friction from
labor, as on ^{the trunk of} his body, ~~the thigh~~, and
on his fingers. The destruction of the black
color was probably occasioned by the
absorption of the ^{colored matter of} rete mucosum, or
perhaps by the rete mucosum itself,
for pressure ^{& friction} it is well known aids
the ^{absorbing} action of the Lymphatics in every



part of the body. — It is from the latter
 I conclude, that the palms of the hands
 of negro women who ~~stand~~ spend their
 lives of at a wash-trip are generally
 as fair as the palms of the hands in
 labouring white people. —

2 Depletion ~~has an indirect~~ whether
 by V.S. — purging, or abstinence has a
 certain effect in lightening the black
 color in negroes. So many facts induce
 me to believe ^{and} it is an alteration and it is
 a ~~very~~ ^{very} temporary change tho' of
 a more temporary nature has often
 been observed in negroes from the
 influence of fear. —

4 Dr Beddoes tells us that he has
 discharged the color in the black

in them produce a large portion of happiness in the world. We shall destroy
One of the arguments in favor of the
~~color~~ enslaving the negroes, for this
color has been supposed by the ignorant
to mark them as objects of ^{the divine} ~~divine~~
~~divine~~ misery from the judgments, of heaven,
~~judgments~~ ~~to destroy~~
It by the harmed to qualify them for con-
-stant labor in hot & unwholesome
climates. 2 We shall add greatly to ² ~~1~~
happiness, for however much they pre-
-tend to be satisfied with their color, there
are many proofs of this preferring that
of the white people.

3 We shall under the belief of the
whole human race being descended
from one pair, ~~but~~ more easy, &

brood of negroes by infusing it in
 oxygenated muriatic acid, & leprosy it in
 by the same means in the hand of a
 negro man. see Hawkins: fact p: 120

5 ~~A citizen of Philad~~ A citizen
 of Philad^a upon whose veracity I have
 perfect reliance assured me that he had
 once seen the skin of ^{one} the side of the
 cheek inclining to the chin, and of
 that part of the hand in a negro boy
 changed ^{by the juice of unripe peaches} ~~in the same way~~ by his eating
~~cannibals~~ of which he was very fond
 of eating) falling & resting frequently
 upon those parts of ^{his} the body.

To encourage attempts to cure
 this disease of the skin in negroes, let
 us recollect that we shall by succeeding

universal, and thereby not only add
weight to the Christian revelation, but
remove a material obstacle to the exer-
cise of ~~its~~ ^{that} ~~divine precept~~ ~~its~~ ^{that}
universal benevolence which is in-
culcated by it.

599.184.000

V ~~Old age~~ Old age is the effect
of such a decay ~~of~~ or loss of the
sensibility & contractility of the
body, as to render it incapable
of ~~committing~~ receiving & propagating
the motions of life. ~~This~~ such is the
change in this respect induced on
the solids, that ~~they~~ some of them
viz: the arteries are sometimes con-
verted into bone. Excitement & exit?
are both exhausted in old age, and death
from old age is nothing but a general
palsy. I said formerly it began first
in the eyes, & Sphincter of the bladder.

~~completeness of our knowledge~~

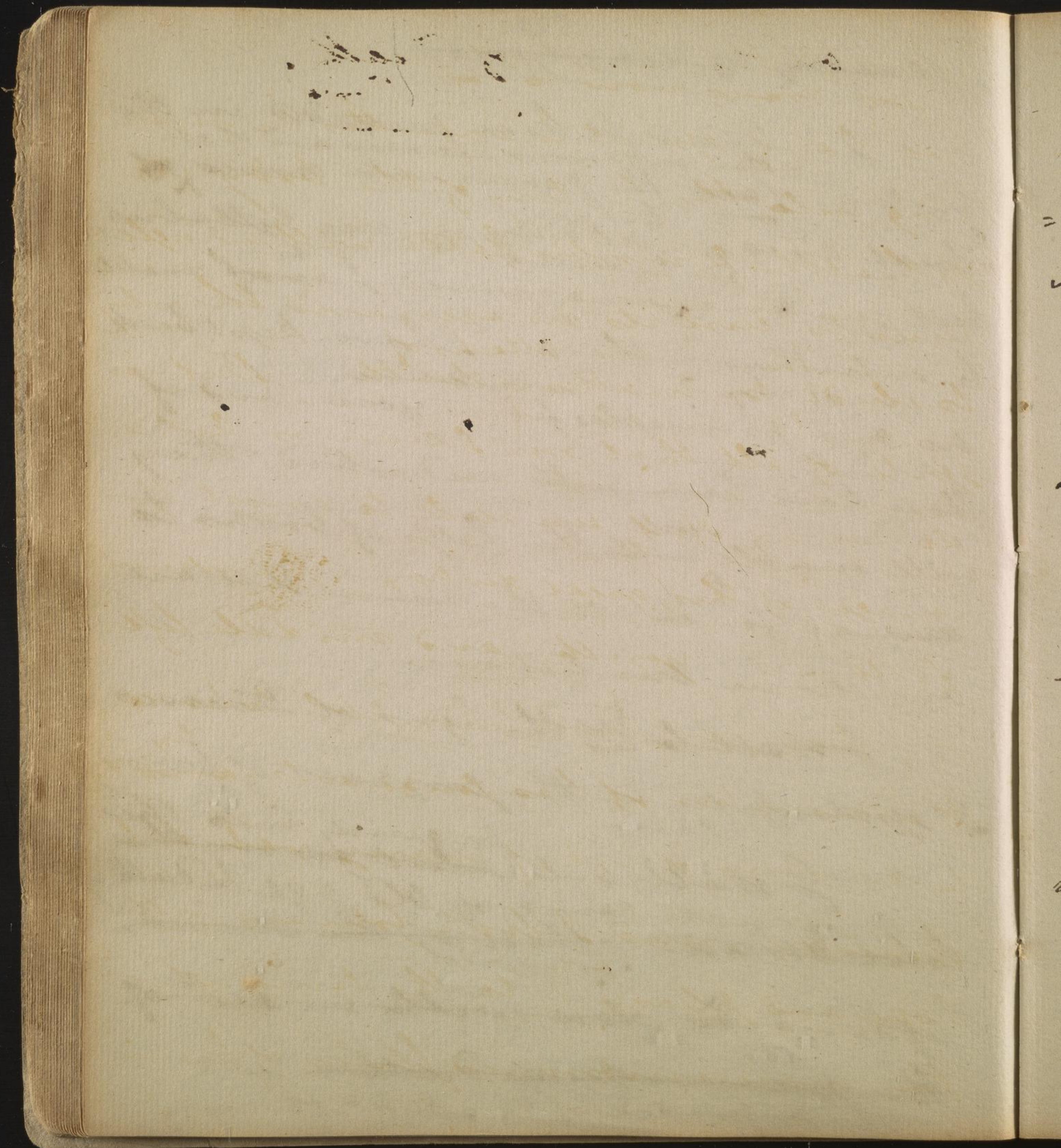
I intended to have proceeded in the
^{other cutaneous diseases and of all}
 history of ~~all~~ the proximate causes of
^{that are}
 local diseases, set down in our syllabus,
^{for lecturing}
 but our time, being expired, I ~~was~~ ^{am} unable
 to enter upon them. I have kept back
 of my principles ^{in medicine} from you - and if
 these have been well understood, they
 will enable ^{you} with the help of books to
 account for all the diseases that are
 omitted in our lectures.

I shall ~~to~~ ^{of the signs of Diseases}
 I spoke fully in the prognosis of fevers.

I shall only ^{inquire into the} ~~select from the~~
 proximate cause of old age & death.
~~local diseases - those of the mind~~

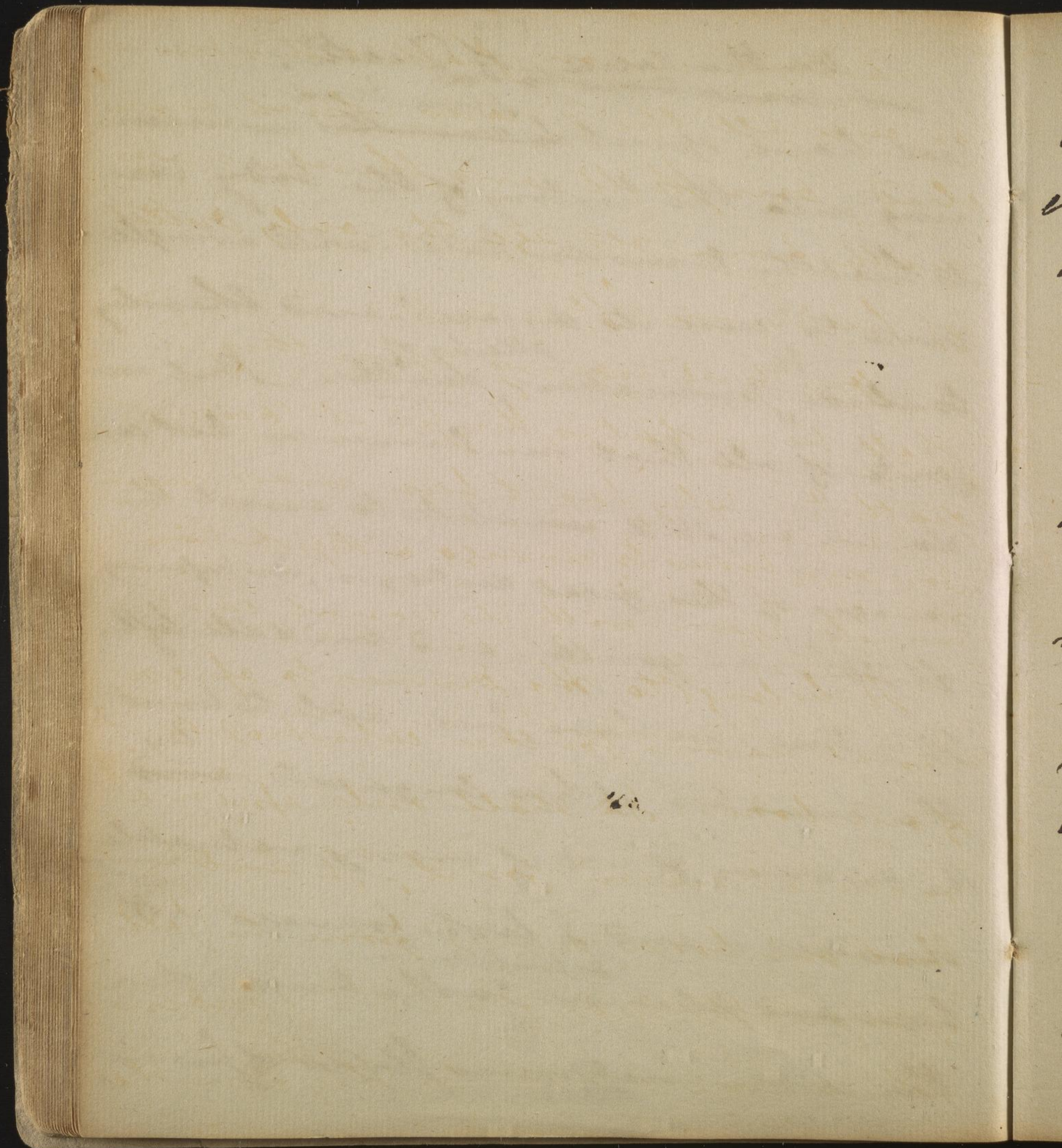
~~afterwards close with an acc^t of~~

~~the proximate of death~~
 in practice of Physic &c 12. -



on the cause of Death.

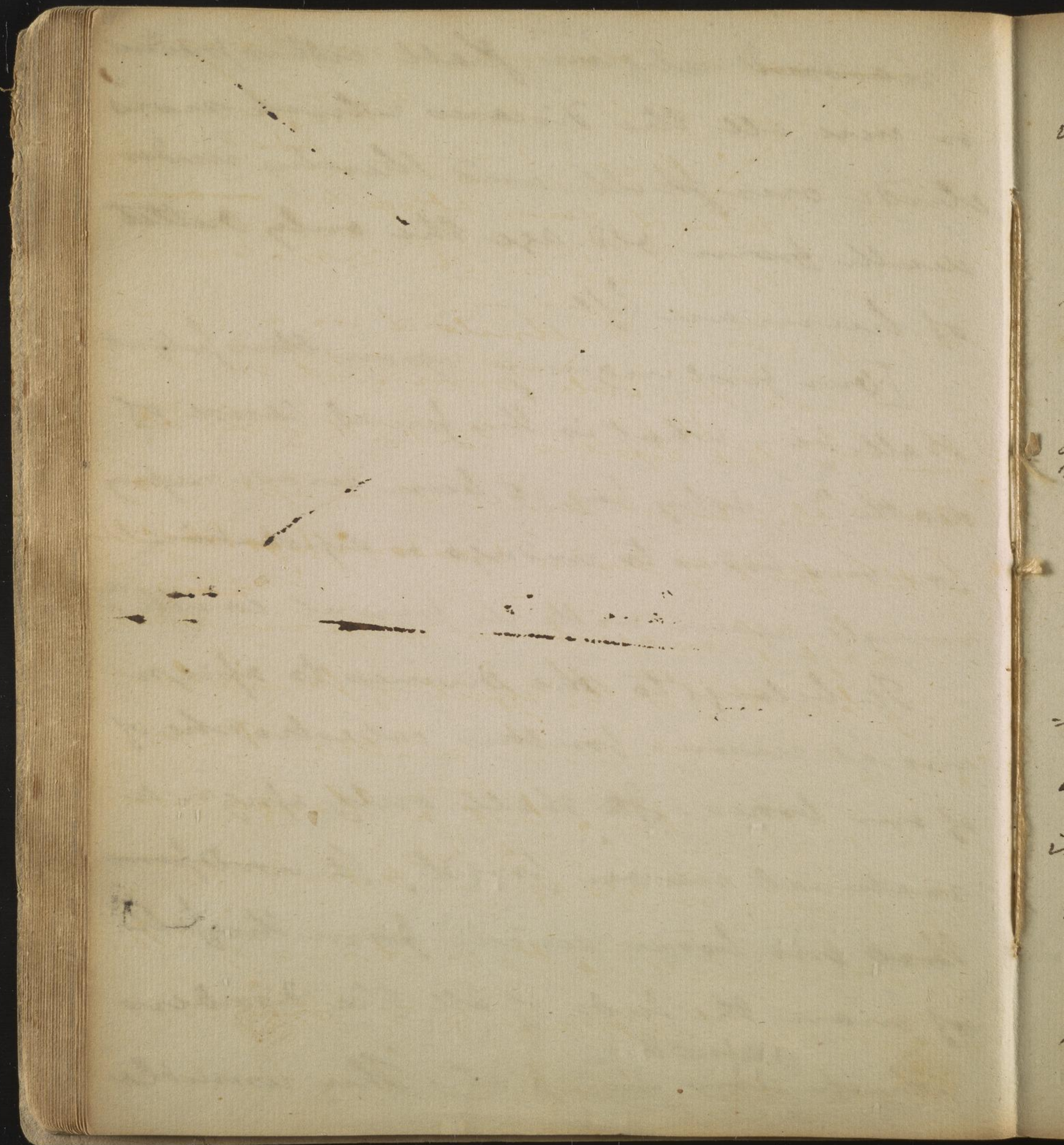
~~but some~~ ^{some time} we have spent ~~to~~ in inquiry
 -ring into the history of the body in
 its healthy & morbid states - with a single
 view to cure its diseases, and thereby
 to elude ^{the} premature ^{attacks of} death. But in
 spite of all that our Science or Art can
 do, we are still unable to arrest the
 ravages of this great destroyer, in infancy
 - childhood - youth - and middle life.
 It is true - we have been able to limit
 the number of his conquests ^{by} ~~and~~
 the discovery & use of many valuable
 remedies - and I look forward with
 hope ^{& confidence} ~~and pleasure~~ to the time, when
 the more improved states of science,



524

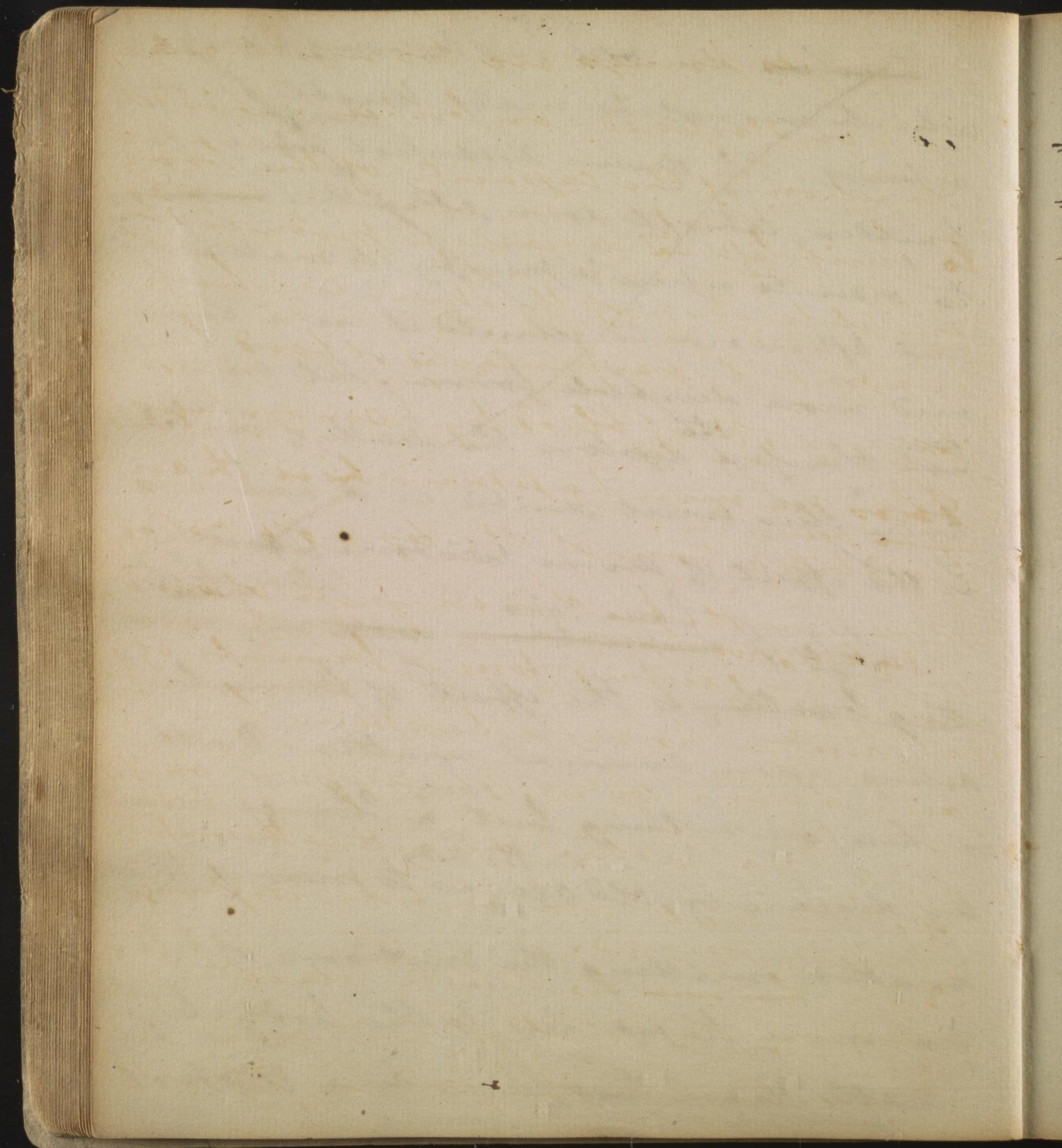
reason & religion, shall either prevent,
or cure all the diseases which now
cloud our skill, and thereby render
death from old age the only outlet
of human life. —

[Our first inquiry upon this subject
shall be — what is the final cause of
death? — why has it been made necessary
for our bodies to undergo a dissolution &
mingle again with its parent earth?
— It belongs to the Divines to assign
moral reasons for this catastrophe of
of our bodies. ~~It~~ shall only assign a
natural reason for it; — ~~It would seem~~
that our bodies derived from the fall
of man the seeds of all the disorders
which now ^{infect &} distress it. They resemble



~~Therefore an old and tottering house~~
 which cannot be made ^{stronger} ~~terrible~~ by any
 repairs. The divine Architect ^{like a wise}
 builder, takes it down ~~altogether in order~~
 to order to refine & purify its materials,
 and afterwards to rebuild it in a new
 and more durable form. Let us ~~us~~
 cease ^{to} therefore deplore the death of our bodies.
 Even this event terrible as it appears
 is the effect of divine wisdom (at present)

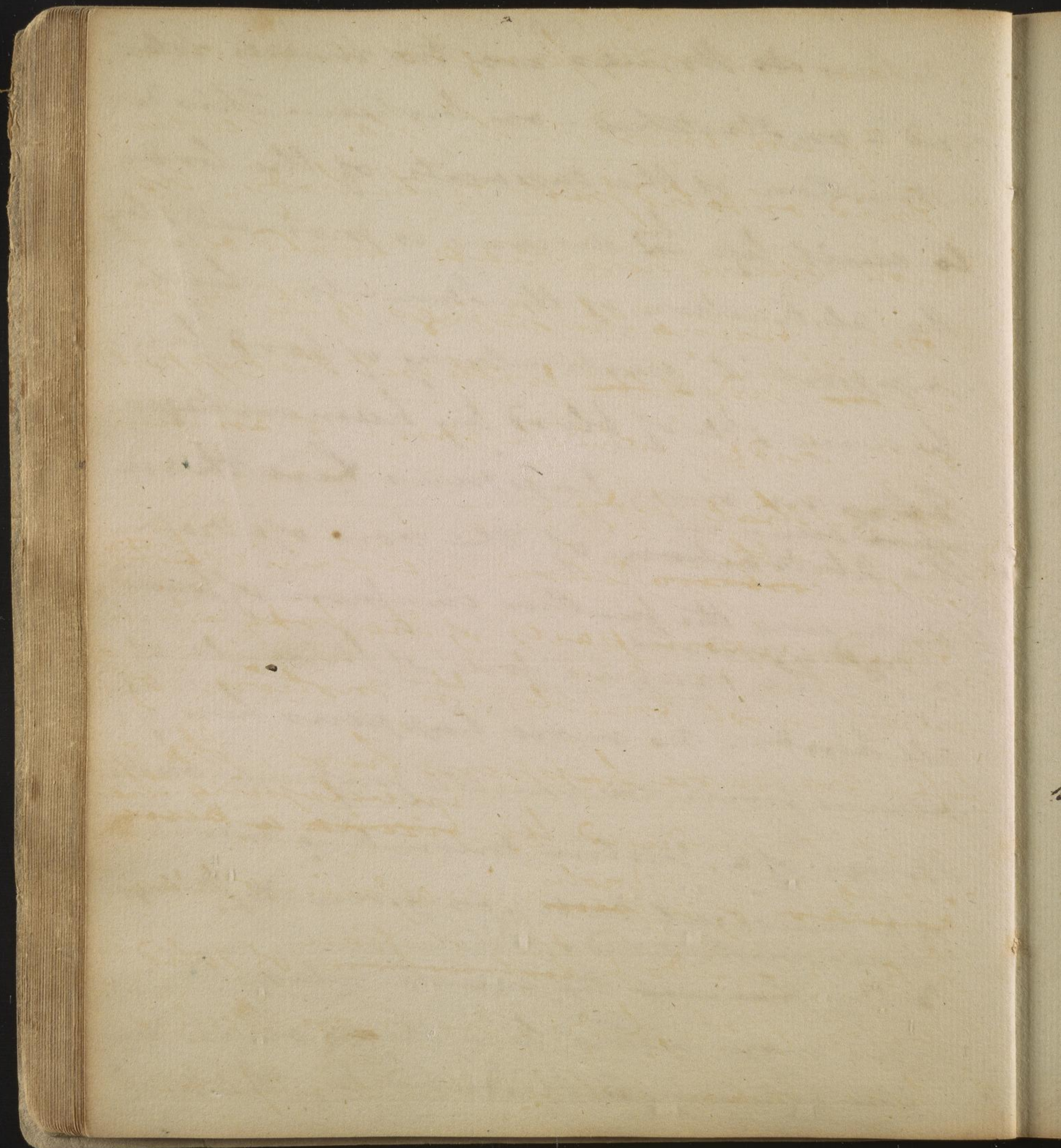
Life I ^{have said} ~~conservation~~ with ~~may depend~~
~~ing breath~~, is the effect of stimuli
 acting upon animal matter. Death
 is therefore nothing but a ^{such} change induced
 by disease or old age ^{on the body}, as to prevent this
 matter emitting the motions of life.
 no more happens to the body by
 death than happens to a Violin



when its strings are too much relaxed - or stretched - or broken. This destruction of the capacity of the body to emit life ~~in~~ ^{by} disease is produced by the abstraction of the stimuli which support it, particularly of food by famine, & of blood by hemorrhage. ~~There~~ no more happens here than ~~what~~ occurs in the abstraction of the bow of a violin, destroying the further emission of sound.

^{Death is produced}
 2 By the excessive force of stimuli of all kinds. no more happens here: occurs from too much pressure on the strings of a violin preventing the emission of a musical note, or from its strings being overstrained.

3 - By ~~the same~~ too much relaxation. - no more occurs here, than occurs in the extinction of sound by the total



527
relaxation of the strings of the Violin.

4. By an error in the place of certain fluid or solid parts of the body. no more occurs here than would occur from fixing the strings of the Violin on ~~the~~ ^{its} body of the without the support of the bridges which raise it an inch from that body.

5. By ~~certain~~ ^{the} action of certain vitiated fluids upon parts of the body which emit most forcibly the motions of life. no more happens here, than what is produced by ~~fixing a piece~~ ^{involving the} strings of a ~~piece~~ ^{Violin} in a piece of Wax.

6 By wounds & ~~destruction~~ ^{the solution} of solid parts of the body. no more occurs here than when the crucifixion

✓ The convulsions & preternatural
strength which sometimes precede
death, are the ^{effects of the unequal action} ~~effects~~ of stimuli
^{partial} the remains of the
acting upon partial excitability
of the system.

✓ In short—
✓ no more happens to the body from
the destruction of its consistency & cohesion
than happens to a loadstone which when
broken to pieces ceases to possess the
usual qualities of a magnet.

The ^{formation} dissolution of the body by
death is generally accompanied by

of sound is prevented from a Violin,
by cutting its strings. —

& lastly death is produced
By rigidity and even an ossification
of the solids. Death from old Affairs
from this Cause. — The solids ^{here} refuse
to yield to the impressions of stimuli
from within & from without. NO
more happens here that would happen,
if a Stick — or a pipe Stem were placed
in the room of Cut gut upon the body
of the Violin. —

Death then Gut. is nothing but
an inability ^{from a variety of causes} or incapacity ^{to} of animal
matter to receive, ^{to emit} and preserve the
vibrations &
motions of life. —

Here then we quit the human
body — ^{pale} — ~~cold~~ — motionless — ^{pale} — cold — and

pain, but there many exceptions
to this remark. This I took notice
of it formerly, and added that I believed
death often came on ^{like sleep} with pleasurable
sensations. The nature & seat of a
disease has a great influence upon
the pain of dying. ^{Death from} Discares of the
bowels is ~~far~~ perhaps the ^{more} most pain-
-ful than ~~for~~ when it is seated in
any other part of the body. The Marquis
of Mirabeau who died of an inflamnⁿ
in his bowels declared that he "felt in
a moment the pangs of a thousand
years". Next in pain is death from
a disease in the ~~bladder~~ ^{kidneys} ~~bladder~~ &
bladder - then the head - ^{last of all} ~~lastly~~ ^{the}

tending by putrefaction ~~to a liquid~~ ^{to a liquid} ^{with its native}
 earthy matter. — we are soon to
 be separated, ~~from each other~~ — never
^{probably} to meet again, ^{probably} in the exact relation
 we sustain to each other upon the
 seats we now occupy in this room.
 — not so — the particles of matter
 which compose our bodies. After
 lying in the grave till the seeds of
 weakness and disease, are totally destroyed,
 eradicated from them, — they shall again
 be united, and every particle which
 composes them shall occupy its former
 place in a new and a ~~more~~ durable
 form. — The analogies of this ^{revival &} reunion
 of the particles of our bodies are so
 numerous in the works of ^{both of} nature

in the lungs & liver. I shall hereafter
in the Prognosis of fever describe the
Symptoms of death, & shall mention
the means of lessening or destroying
its pains Altogether - for this
is an ^{essential} part of a Course of lectures
on ^{the} practice of physic. It has hitherto
been too much neglected,
from a mistaken idea that the
business of a Physician is only
to cure Diseases. His business
is to lessen human misery in all
the forms in which it attacks the
body of man. I shall only add
here that Death from old age
is attended with no pain. It is

comes on with the gentleness
of sleep. In a more improved state
of mankind, ~~death~~ for such as is
predicted in the scriptures, death
from old ~~age~~ will be universal,
and of course the pains which
now attend it will be unknown.
are not a

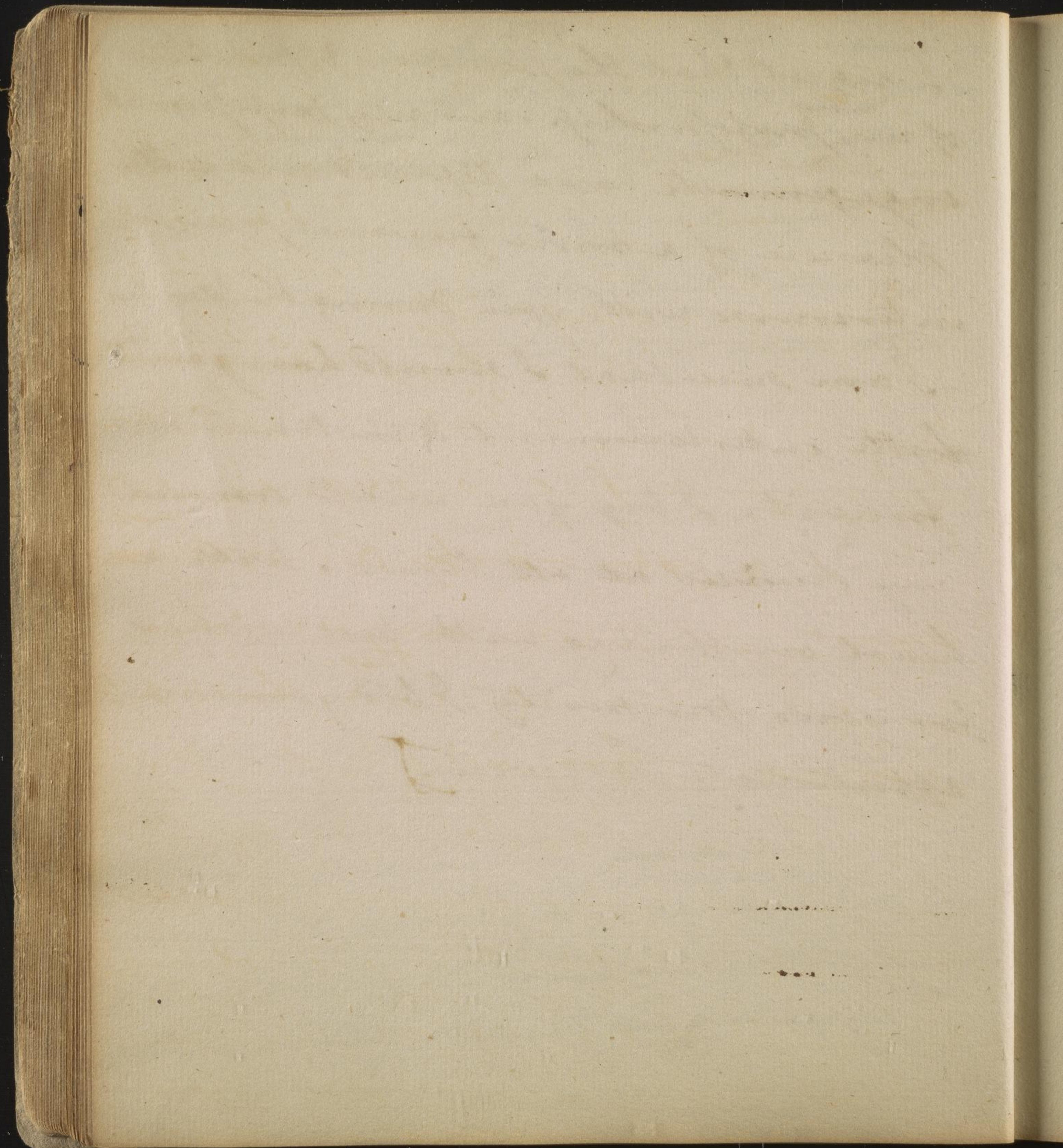
The Signs of death - ~~not coldness~~ respiration
not coldness of the body, not
of pulse - ~~and stiffness~~ nor even putrefac-
-tion - ^{taken separately} but a long continued appearance
of all these Signs ^{of death} ~~found~~ - Haller de
especially putrefaction.

forward to the joyful morning of the
 resurrection when his ~~dejected~~ patients
 and fellow Citizens,
 shall awake from the Slaps of Death,
 pure - healthy - and ^{capable} for ever Afterwards
~~incapable of bearing~~ of receiving, and
~~not of an animal~~ ^{an immortal}
 retaining the stimuli of life. —

With this we close our lectures
 for the present year. Accept of my
 thanks for the Attention with ^{ch} which
 you have honoured them. I ~~have~~
~~only to~~ excuse their deficiencies, &
 ascribe them to the ~~smallty~~ & difficulty
 of my subjects. I ~~do not~~ ^{do not} examine
 the new principles & practice I have
 taught you with severity & candor,
 and if I have been mistaken in any
 thing — convince me of my error

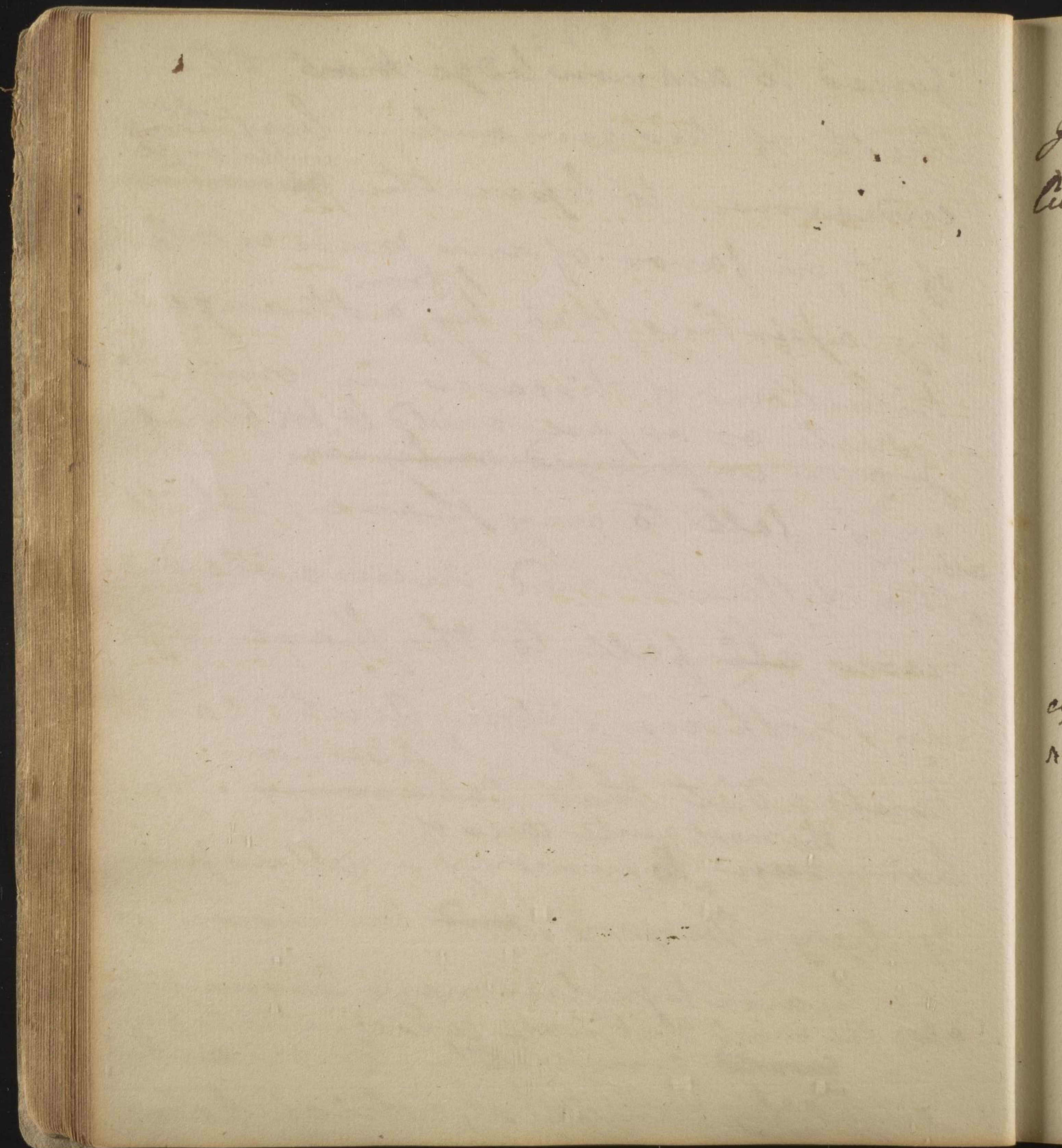
Before I conclude ^{such of}
✓ I have only to recommend to you
~~as have been~~ ^{as have been} ~~about to take a~~
~~to the University~~ ^{about to take a}
final leave of the University, not to
suffer the ~~burden~~ ^{burden} of practical duties of
your profession to interfere with the
study of medicine. A Physician who gives
over-reading when he enters into practice, will
often be less wise at 50, than at 25. It is in
consequence of having observed how much
Practitioners of Physic are disposed to lay aside
their books, that I have sometimes proposed
that Degrees in medicine should be given only
for a limited time, and that ^{they should be} ~~a Physician~~
~~renewed~~ ^{renewed} once in ~~five or~~ ^{seven} years
^{upon an examination,}
provided it appeared, that the candidate had
lost no part of the ^{knowledge} ~~possess~~ during that period
which entitled him to his first degree.

I regret that the peculiar difficulties
of my ^{new} [^]professions, and my professional
engagements have deprived me of the
pleasure of a more frequent private
intercourse with you during the winter.
— I am sure that I should have gained
both entertainment & instruction
from it. I beg you would command
my services at all times. With a
heart overflowing with best wishes
for your prosperity, I bid you an
affectionate farewell.



However unpopular⁵³³ they may be in this city,
~~They~~ I have had great pleasure
in hearing that they have been adop-
-ted in ~~some~~^{several} of the West India Islands,
and in some parts of Great Britain
& Germany. It will be no objection
to them with gentlemen who know
human nature to observe that
they are ~~opposed~~^{not} opposed, ~~for~~
~~rejected~~ by any Brethren in this
city. ^{these principles} One criterion ~~they propose~~
~~and the~~ of ~~their~~ being true, and
that is, they lead to a more
~~simple, a more summary, &~~
~~a more~~ successful mode of treat-
-ing all diseases ^{than any that has been proposed.} The gentlemen
who oppose them, have been

forced to acknowledge ~~that~~ the
 truth of this remark - but they
 endeavour to ^{influence} ~~open~~ the ~~operation~~
 of it, in favor of my principles,
 by asserting, that ^{from} ~~by~~ a strange dis-
 tribution of diseases in our city
 such as are mild & trifling
~~now employed only in~~
 only, fall to my share, while
^{all} ~~the~~ difficult and incurable dis-
 cases ^{all} ~~fall~~ to the share of
 my Brethren. You, Gent: can
 contradict this ^{assertion} ~~calumnious~~. You
 have seen ^{the most acute cases of} Pneumony - yellow fever,
 Epilepsy - Dropsy, ~~and~~ Contusion of
 the brain & pulmonary Consumption
 also the most obstinate cases of interm ^{fever},
 all ~~cured~~ completely, or nearly
 cured by Remedies, which have



the
 been the result of principles ^{ch} ~~sw~~
~~I have~~ have ~~you~~ been taught in my
~~taught~~ ~~in~~ ~~these~~ ~~rooms~~. — ~~many~~

as
~~the~~ the corruptions of the modern
 governments have rendered ^{an} the opinion
 universal, that ^{political} revolutions ~~are~~ necessary
 & inevitable; so the ignorance, errors,

fraud, ~~and~~ imposture & impudence
 & murders,

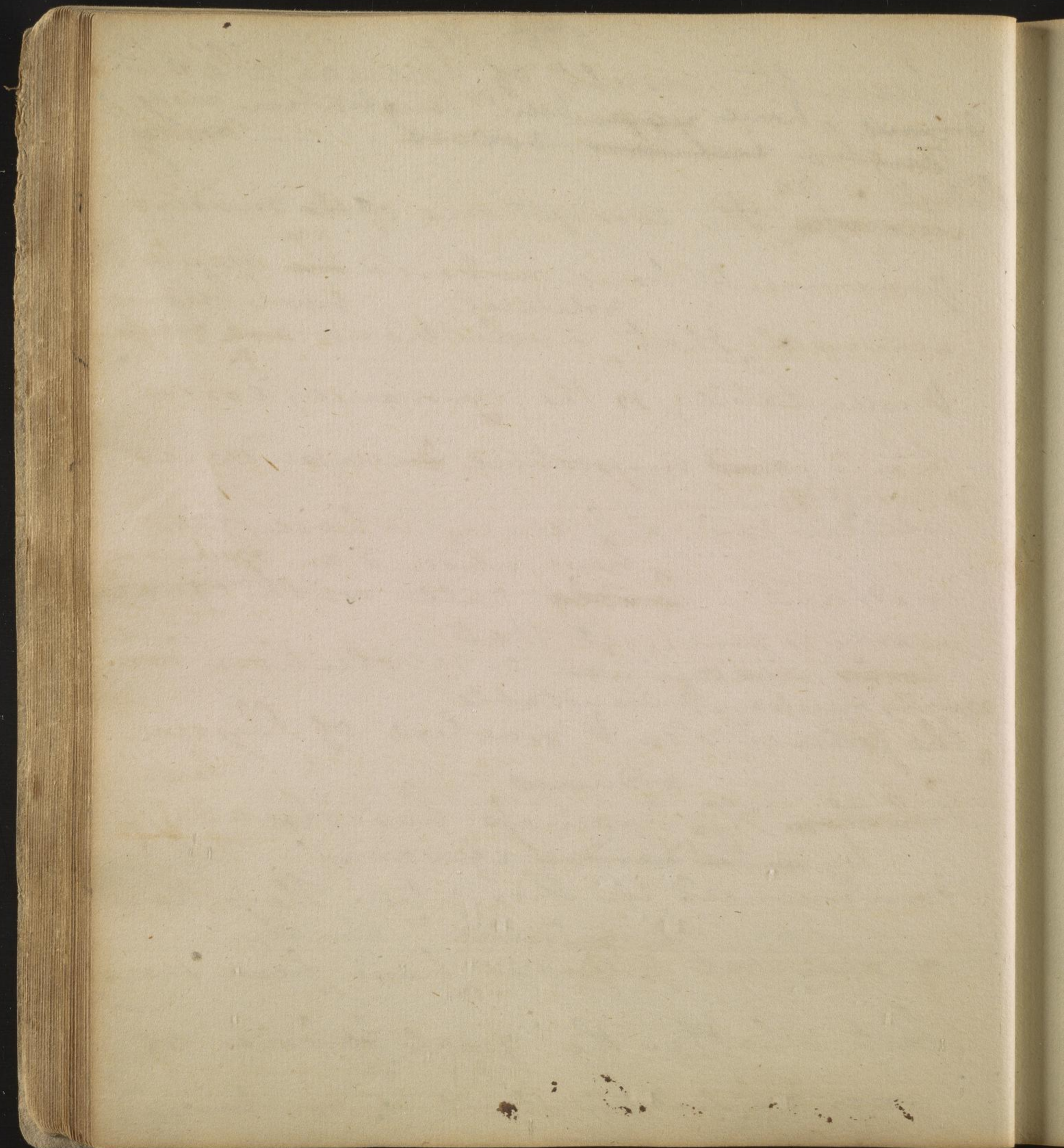
which prevail every where in
 medicine, ^{have rendered an opinion} ~~boldly~~ call with equal
 nearly as universal, that
~~for~~ ~~reason~~ ~~for~~ a revolution ^{is} ~~is~~
 equally necessary & inevitable

the principles & practice of Physic.

^{arduous} ~~whether~~ This business has already ^{been}
 lay in the hands of a few men
 commenced in this city. The pillars

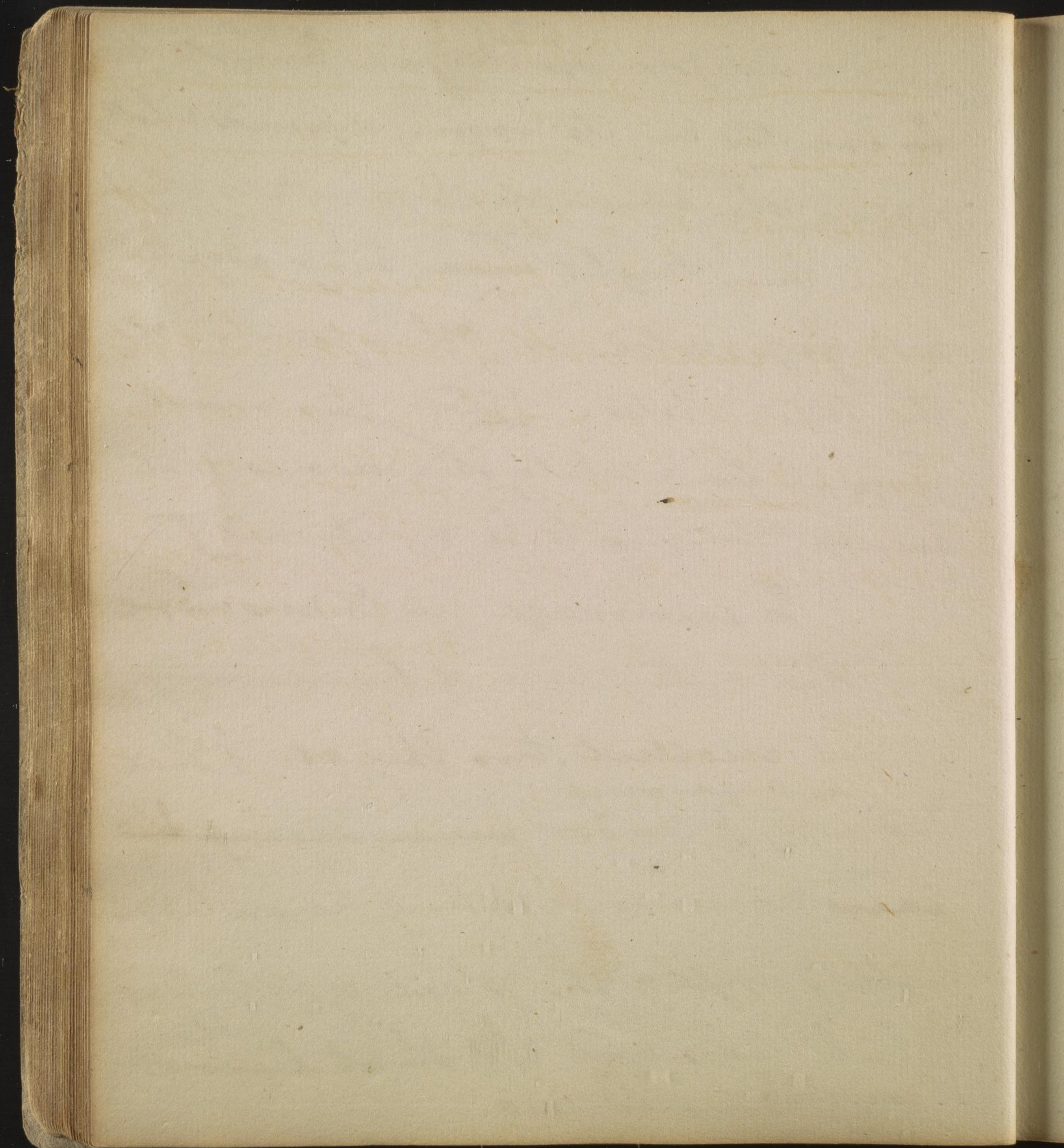
in medicine already
 of ancient prejudice, have been shaken,

but whether the great fabric of
 error & falsehood shall be overturned,



536
and a simple republican ^{of medicine} temple ^{be}
be erected in its room, depends wholly
upon the ^{new} principles & practice which
have been ^{here} taught ~~here~~, being adopted
and supported in other parts of
the United States. ~~There they must~~
~~languish, for a while, for reasons that~~
~~are too obvious to be mentioned.~~

To encourage us to persevere
in this enterprise of humanity,
let us recollect two things. 1st That
^{in acquiring}
industry, & candor ~~in acquiring,~~ &
ⁱⁿ
~~have~~ communicating knowledge,
will supply the place of splendid
abilities, and 2^{ly} that ^{the} divine
Supreme Being



in conveying⁵³ new & important
~~providence generally~~ ~~weak & unworthy instruments~~
blessings to mankind, frequently
makes use of the weakest, and
most unworthy instruments
for that purpose, in order that
the ^{gratitude} ~~honor~~ & praise ^{due} for these
blessings may be wholly his own.
go back to 532 -
opposite side. -

V Under this gent: I shall introduce
not only an explanation of the causes
of the signs of diseases, but make
such inferences as from them upon
the probable issue of a disease in
life or death ^{as have been the result of my own} The prognosis in diseases
observations.
is by no means a part of the duty of
a Physician. It ~~was~~ crept into medicine
when the profession of a the Priest, &
the Physician were united together. The

of the signs of disease —

1 as they appear in partial debility,
direct & indirect.

I need hardly name these signs of debility. They are an inability to perform the motion. I exclude pain in motion or exercise from debility, for pain is always the effect of morbid excitement.

The signs of debility whether direct or indirect are so exactly the same,

that they can only be distinguished ^{its} by taking into consideration ~~the~~ causes — and the habits ^{its} stages ~~of the disease~~ it attacks.

when these circumstances are attended to there will be no danger

V Debility ~~the~~ ~~the greatest~~ ~~debility~~ is by no means
the sign of danger. We see it in the
beginning of ~~many~~ diseases ^{from oppression} in which
the system is strongly impregnated
with excitability. It is sometimes
attended with danger in the close of ^{acute} ~~the~~
diseases. Many people die of debility
after the removal of the disease ^{preceded} ~~which~~, or
created it. It is of consequence to
know this, in order to prevent death
by obviating it. —

+ Having spoken of the connection of
the pulse ^{the} with the Arteries, & ~~been~~ of the seats of
diseases in them, I go on — de

539.
of mistaking them.

The debility is partial in most cases affecting some one of the systems more than another. The morbid excitement ~~about~~ generally follows in that system only which has been exclusively debilitated. ^{Even} when all the systems have been debilitated, morbid action takes place in ~~the~~ ^{but a} part of them upon the application of exciting causes to them. Remember always disease is local. V

2 Of the signs of diseases in the pulse. +

① The blood vessels ^{occupy the highest} ~~are the~~ pneum rank in point of vitality & ~~importance~~ ultimately ~~most~~ important in ^{human} the body. It is highly proper

Handwritten text, possibly a signature or date, located in the lower-left quadrant of the page. The text is faint and appears to be written in dark ink.

therefore to seek for the signs of health
 and life in them above every other
 part of the body. The ^{pulse} ~~pulse is to the~~
~~blood vessels~~ not only, indicates the
 state of the blood vessels, but from their
 intimate connection ~~of~~ with all the
 other systems, it indicates more or
 less all ^{this} ~~its~~ morbid Affections. In
 short, the pulse is to the body what
 the dial plate & hands are to a watch.
 It tells us ^{nearly} all that is going forward
 in the body. It is the above all other
 signs ~~the~~ barometer - of a measure of diseases.
 Physicians have often been
 distinguished by their predilection to
 particular symptoms by which
 they judge of the state of the system.

^{one}
+ In ^{our} introductory lectures I mention?
the difficulty of relying upon any one
of them. [repeat them]

V It is somewhat surprising that
Hippocrates & Celsus knew and say
so little about it. Galen was the
first Physician among the Ancients
who attended to it. ~~and~~

~~These are~~ ~~have been~~ ~~of these are~~
~~some~~ have chosen the ^{tongue} ~~the~~
 some the respiration, some the
 countenance & some the excretions
 of Urine, Seces & sweat. ~~mine~~ ^{my}
^{mode of practice}
~~system~~ rejects none of these signs,
 but it fixes ^{with} its principal
 attention upon the pulse. ^{my}
~~propile therefore I hope like the~~
~~for while the followers of~~

will be known every where by their
 knowledge & predilection ^{to} of the pulse
 in forming a judgement of diseases.

^{further}
 The Dr. considering this subject
 I shall 1 mention the facts which
 belong the history of the pulse in
 its natural state. 2 I shall mention

V The pulsations in this natural state
of the pulse in point of frequency, are ~~at~~
equal intervals - soft - ^{but} open & vigorous, and
free from a sense of resistance.

542

all its varied states and
3rd Delivers a few directions for the
best manner of discovering these
states by the fingers.

I - The natural state of the pulse
in ^{adults} ~~most people~~ in point of frequency
in middle latitudes is ~~about~~ between
60 and 80. Its medium is 66. $\sqrt{\quad}$
~~the force~~ But the following circumstances
have an influence upon its
frequency, ^{& in many instances upon its force.} ~~as well as its~~

1 Age. It is from 130 to 140 on
the day of the birth of a child. During
its first year it is from 108 to 120.
During the 2nd from 90 to 108. Du-
ring the 3rd year from 80 to 108.

It continues at 80 to 108 during the 4th & 6th years of its life. In the 7th year it falls ^{from 90 to} to 72. At, and after 12, it is the same as in adults which is ^{from 45 to 50} it is only from 60 to 80. In old age, it becomes slow, and intermitting. This is so much the case that a pulse perfectly regular in a very old man is a sign of a disease. The slowness in some cases, descends to 42. 30 & even 26 in some old people, according to Dr Heberden.

2 sex influences the frequency of the pulse - It is always quicker in ^{women} ~~men~~ than in ^{men} ~~women~~.

3 Different States of Society, or

+ Dr Douxion Louape a physician lately
from Trinidad informed me July 24. 1807 ⁱⁿ ~~last~~
^{of 1807} summer, that the pulses of the Indians on
that Island, and on the Coast of South America,
were uniformly less frequent, than the pulses
of the white inhabitants of those Countries. In
the former it from 55 to 60 - in the latter from
65 to 68 in a minute.

+ ~~see Mr. Williams's reports~~ The same
result took place in the State of Georgia in
a number of exp^s ^{at my request} made ^{at this} by Mr. Colmer
^{city} upon the pulses of a number of Indians.
They were it is true higher than 60, but less
frequent than ⁱⁿ the traders who lived among
them - and still less frequent than in the
civilized people who attended the treaty with
Col. Hawkins ⁱⁿ found it at 40 in many ~~cases~~
there. I wish these ^{facts} to be remembered for Mr
Colmer has contradicted it in his view of
a days falsely Dr Barton was present at ~~many~~ the
America ^{Dr} examined the pulse of an
~~exp^s ^{was} ^{have} related~~
Indian Chief only, ~~who he whose habit~~ who
lived occasionally among civilized people, &
~~was two hours =~~

of civilization influences the pulse.

It is slow in all savages who ~~use~~ ^{want}
~~not~~ the stimulus of tho't & labor
to act upon their bodies. ~~But~~ ^{In}

^{in this city}
8 Indians out of 10 in an experiment
~~in the presence of 6 students of medicine~~
~~I made a few years ago I found~~
~~the pulse beat 60 but 60 strokes~~
~~in a minute.~~ ^{Indians}

One of the persons
in whom it was more frequent,
had been sitting by a fire, and the
other I found afterwards was the
son of a Frenchman, by an
Indian mother. ~~go to 1. of new~~
^{writing.}

~~Country~~ The inhabitants of
the country whose minds are

V It is quicker in a warm, ~~climate~~
than in a temperate & cold climate, & it
is quicker in new comers in the W Indies
than in old inhabitants, — and in newly
imported, than in old slaves under equal
Circumstances of Age. Eg: In ^{a white} new comers
in Demerary — the medium pulse of the
[*Cetris pusillus*]
pulse in a hut between 90 & 100 is 82 —
In our old Lettles 90 — in a newly arrived
slave 88 — in an old slave 82 — according to
Dr Whistler vol II. p 468.

545
but little excited by constant business,
news, and conversation than the
~~inhabitants of large towns, the pulse~~
have slower pulses than the inhabitants
of large cities. — I wish these
experiments could be extended to dif-
ferent nations, & ~~diff~~ to all the diffe-
rent occupations of men.

4. Sex influences the frequency of the
pulse. It is ~~more~~ quicker in short,
than in tall men. In very large men it
has been observed to be but 55. Haller —
5. Climate & season influence the

~~frequency of the pulse.~~ ^{It is about 100 in the} West Indies.
in a ~~the~~ cold climate than a warm

One. In Greenland it is seldom above
40. It is slower in winter, than

~~Mr. Christopher vol. 14 p 668~~

= When at home upon a trial diet. In this man he says his pulse was as quick as his own, - This I dare say was true. I perceived the same thing in several of the Osage Indians who ^{in the year} 1804 visited this city, but it was after they had had their senses acted upon the new sights & sounds & smells of our city & their for several days, & their ~~Indian~~ ^{human} blood vessels excited by an unusual quantity of cordial ~~alimentary~~ ^{alimentary} & ~~cordials~~ ^{cordials}. + an excited state of the system. This was

is the case ~~was~~ in Mrs ^{upon the Indians.} Clymers experiment. In a ~~case~~ person in whom it was 64 at 7 o'clock 76 mid 71 6 p.m. In another 52.7 at 6 o'clock 65 m. 56 - 6 p.m. mid day. In a third 67.7 at 6 o'clock 76 mid 72 6 p.m. mid day.

+ In this ordinary natural state, the fact I believe is uniformly true. I shall say presently that the exercises of the understanding ^{of the passions} ~~of the passions~~ affect the pulse; now as the understandings of Indians are ~~often employed~~ generally in a quiescent, or torpid state from the limited number of subjects which occupy them, & those subjects only for a short time, it is no wonder their pulses are slower, or less active, than the pulses of civilized people.

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7 Light has a great influence upon the pulse & it varies and lessens with different degrees of light and darkness. It is great consequence to attend to this fact in judging of a disease by the state of the pulse, and in prescribing for diseases particularly those of a febrile nature. Light and darkness are both hurtful & useful according to the state of the system in which they are applied. I shall hereafter explain certain phenomena ascribed to human attractions, chiefly to the effects of light & darkness upon it.

~~Now, and~~ according to Dr Haller, there is a difference of 15 strokes between the morning & evening viz: 65 & 80. In some cases there is a diminution of frequency at night. It differs as to frequency in the

sleeping, & waking states. It is much from absence of the energy or stimulus of the mind or light & motion. It is lowest in sleep & after waking, but soon falls to 70 & below it.

B. Different positions of the body affect the frequency of the pulse.

It is slowest when we lie on our backs - It is quicker when we sit

11⁺ Food and drinks affect the pulse. It is quickened by a full meal, and by distilled & fermented liquors. It is reduced in its frequency by fasting.

✓ 10 Different positions of the Arm affects the pulse. It is much reduced in frequency by being uncovered, and by the pressure upon the body upon it in bed, when the patient lies on his side. + see above

12⁰ Exercise quickens the pulse. ^{a pulse which} ~~from 70~~ 64 in a person while sitting, is 68 when standing, ~~to 90 or 112 in many people.~~

78 walking at the rate of two miles an hour - 88 when walking four miles an hour

140 to 150 when running.

15th Pregnancy influences the pulse. It is more active than natural ~~to~~ as soon as conception

up, and quickest when we are in

an erect posture. —

12 ~~12~~ The exercise of the Understanding & of certain
all the passions of the mind affect

the pulse. The stimulating passions
eg anger increases to 104 strokes in a minute.
give impart quickness & force to it.

The simply ~~depress~~ sedative passions as
grief, fear &c reduce it in frequency
& force, provided it be felt before

otherwise it is accelerated by stimuli

acting upon ~~accumulated~~ ^{the} excitab^y
which has been accumulated by those

debilitating passions. go to 1. now writing

(12) 13. ~~Conversation quickens the pulse~~
20. ~~It belongs to the natural history~~
of the pulse to take notice, that in
sound persons in good health, it is
preternaturally slow [Mrs Chippole]

takes place, and this activity is increased at the times
in which the menses ordinarily flow. \neq
even in pregnant women as well as others.
Such a pulse is ~~marked~~ indicates a
high fever at 60.

\neq In the Rev^d Mr Clayton of Liverpool
it was at 100 - until he had a severe
fever - after w^h it was between
60 & 70. D^r Whyt mentions a person in whom
it was 120 in its natural state. In a fever in this
person it was 180 when convalescent it was
140 when lying & 220 when in sitting posture.
It is further ascertained with difficulty in
very fat people from fat compressing, or
burying the artery.

(a) - a kind provision of the author of nature!
- we see external diseases, but internal ones
are concealed from us.

16 \neq Puncture & P^r in fluence the state of
the pulse - as opium - Bark - Blister - the
last according to parts to which they are applied.
see Boerhaave. Vol 2 p 22. 17 a cough. 18 from
bark over to 67. 549

I have read of its total amount 548 & with good health
but 407 In others it is preternaturally
quick [1000 Peters 100] In some the
artery, we commonly feel, runs
above the Radius parallel with the
Thumb. It is of consequence to know
these variations from nature, when
they occur in our habitual patients.
- Indeed a great Advantage would
arise from knowing the exact
state of ^{the pulse} every patient we attend
in its ordinary & healthy state.

II. we come next to inquire into
the morbid states of the pulse. ~~But~~
~~we 548~~
It departs from order and health,
1 In frequency, and quickness. By
frequency is meant the number of

† This subject ~~does~~ in another place; at present
 I shall only ^{remark} ~~remark~~ that the sympathy
~~with~~ between the pulse & diseased parts is
 not with exact spot-diseased, but with
 the parts contiguous to it. In inflamⁿ: ~~for~~
 I shall say hereafter the ~~more~~ circulation is
slower than in healthy parts. It even ceases
 altogether in some cases. ~~This~~ This has been
 observed by a microscope. The increased action
 is a targo, or lag behind the inflamed part, & it is
 this action which produces corresponding ^{morbid} actions
 in the radial artery. The absence of it produces
 what has been called pale ^{or antheris} inflamⁿ: — It is ab-
 sent in all those cases in which we find signs
 of inflamⁿ after death, without previous fever,
 or morbid action in the pulse. —

Let not the exceptions that have ^{been} ~~not~~
 mentioned to the Union in the pulsations
 of the arteries call in question the advantages

up

1

o

2

3

4

5

6

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